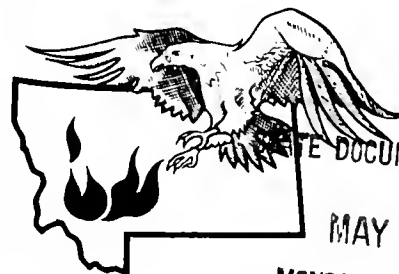


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# ● FIRE GUARD

Emergency Services Newsletter

Number 51 May 1991



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## Fire Warden's Association

Lewistown hosted the Montana Fire Wardens Association Conference. New Officers elected, which are: Tom O'Hara, from Cascade County (President); Duane Brewer from Musselshell County (Vice-President) and Doug Williams from Choteau County (Secretary/Treasurer).

A position paper will be prepared by June as to the Association's concept regarding the distribution of funds attached to the National Fire Forces Mobilization Act, if and when it is funded.

The group previewed the Department of State Land's new "Advanced Wildland Fire Fighter" Course. A great course, we look forward to seeing it presented throughout the State.

## Montana Advanced Driver Education Workshop

The Montana Office of Public Instruction is hosting several one-day Advanced Driver Education Workshop at the driving facility in Lewistown. The Workshops are for licensed drivers wishing to learn techniques for handling critical and/or emergency situations. The Workshop fee is \$100. For more information contact Curt Hahn, 444-4432. The following dates have openings: June 21 and 28; July 18, 29 and 31; and August 1, 2, 5, 7, 8, 9, 12, 13, 14 and 15.

## Ray Blehm Jr., Montana State Fire Marshal Accepts Nevada Position

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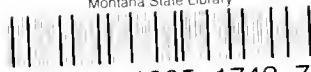
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LAW ENFORCEMENT SERVICES DIVISION  
FIRE MARSHAL BUREAU

Marc Racicot  
Attorney General



Scott Hart Building  
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Helena, MT 59620-1417

**RAY E. BLEHM, JR.**  
**ACCEPTS NEVADA STATE FIRE MARSHAL POSITION**

Montana's current state Fire Marshal, Ray Blehm, has recently been appointed Nevada State Fire Marshal. Ray has been serving as Montana Fire Marshal since October 6, 1986 and will assume his duties in Nevada on May 6. When asked what he considered his accomplishments over the past four and a half years, he asked that he be able to say,

*"I have very mixed feelings about leaving Montana. This was not an easy decision to make, especially because of the passage of HB-809. If the Governor signs this bill, six much needed employees will be added to the current staff. This will give the Fire Marshal's office a big boost in delivering services required by state law.*

*For the past four and a half years, increasing manpower has been my main goal. The current state laws which relate to the office are being revamped under HB-896 which also awaits the Governor's signature. These two accomplishments will, I hope, be in place by the time I leave Montana.*

*Some of the things I feel can be counted as accomplishments are the hiring of good staff, my work with the Hazardous Materials Response Commission, the success in helping implement the state's Petroleum Release Compensation Board responsibilities, Mutual Aid fire frequencies, spending authority for fire investigation and inspection training, fire interface issues, developing new administrative rules and getting the Attorney General to take a close look at the duties assigned to the Fire Marshal Bureau, which has resulted in all the effort to expand the resources available to get the job done.*

*To my many friends in the fire service, I would like to say THANKS for your help, encouragement and good efforts. I'll miss you all and hope to see you again some day."*

In Nevada the Fire Marshal section is a division of the Department of Commerce. Ray will be the Division Administrator, with a staff of 24 employees that manage plans review, state fire and hazardous materials training, fire protection equipment licensing, fire inspections and fire investigations.

We will miss Ray; his experience and knowledge have been valuable to Montana. We also wish him well in this new, challenging position.



**HOUSE BILL 809  
TAX TO FUND MONTANA STATE  
FIRE MARSHAL BUREAU**

"An act increasing the tax on fire insurance premiums for maintenance of state fire prevention and investigation activities; creating a fire prevention and investigation account in the state special revenue fund to fund fire prevention and investigation activities of the department of justice; amending section 50-3-109, MCA; and providing an effective date"

Interest has been generated recently by the fire service community in regard to House Bill 809. The bill basically addresses the need for additional staff in order to comply with the statutes set forth by the legislature. Following is a summary of the history and an explanation of the rationality used in preparation and introduction.

The office of the state Fire Marshal has been funded by a tax on fire insurance premiums since 1911; since 1971 the tax has been 3/4 of one percent. Currently the money generated from that tax is approximately \$480,000 and it is deposited in the general fund. There is approximately \$100,000 of that money that is used for other purposes not directly related to the Fire Marshal Bureau and is not included in the Bureau's budget. Because of this, HB 809 specified the collected taxes be deposited in a special revenue fire fund to be used specifically for fire prevention and investigation activities. This account was amended out by the Senate and, if approved by the Governor, will still be deposited into the General Fund to be disbursed by the Legislature.

Since the tax was set at 3/4 of one percent in 1971, additional duties and responsibilities have been placed on the fire marshal by the Legislature. State law requires the Fire Marshal Bureau to perform several functions. Inspections play a significant role; they include regular fire safety inspections of all public buildings, annual inspections of schools, day care centers, homes for the disabled, units of the Montana university system and state institutions, liquor license inspections, and fuel storage tank inspections.

The Bureau is also responsible for maintaining reports on all fires occurring in the state, conducting arson investigations, providing training and information to local fire officials and certification and licensing of fire extinguishers.

Historically the Fire Marshal Bureau has been unable to meet the demands of the law in all areas and with only five deputies to cover the entire state, with added responsibilities, the task is insurmountable. As an example, in the Helena area alone, the Deputy Fire Marshal whose territory covers a fourteen county area, from Conrad to Dillon, is personally responsible for the inspection of over 10,000 buildings, excluding those inspected by the city fire departments.

It is important to note that in all areas of the state, urban and rural alike, the Fire Marshal has general responsibility, under state law, for supervising the inspection of public buildings. Since rural volunteer fire departments have neither the training nor the time to conduct the required inspections, most rural area inspections are performed by the Fire Marshal Bureau. Also, the Fire Marshal is called in to conduct inspections in urban areas where a complaint is received regarding the conclusions of local inspectors. All of these services are performed under express direction of the law.

Because of the increasing responsibilities of the Fire Marshal Bureau, mandated by the Legislature over the years, the bill also addresses the need for additional employees. The original bill increased the tax from 3/4 of 1% to 1.5%. That amount was amended down to 1% in the House.

The bill has passed both the House and Senate and is currently on the Governor's desk for approval.

## ***HB 896 - REVISION OF FIRE MARSHAL STATUTES***

This bill was introduced to "generally revise certain statutes pertaining to the powers and duties of the state Fire Marshal; changing certain statutory references to the state Fire Marshal to the department of Justice" and amending several sections.

The statutes are basically modernized; many functions and duties are outdated or made obsolete by other provisions and some are simply being repealed. For example, the bill repeals 50-3-107 which allows the Fire Marshal to appoint assistants and clerical employees (superseded by the state administration system). It also repeals the procedure for investigating arson cases; they will be treated as any other criminal case. Other criminal procedure laws are adequate to deal with these cases.

"Other provisions are being amended to clarify procedures for inspections and remedying fire hazards, and to eliminate obsolete requirements for fire protection equipment and allow it to be regulated by rule. There is one fee increase in the bill which raises from \$25 to \$50 the fee that may be charged for licenses and permits to sell or service fire protection equipment."

The bill also changes the terminology from "state fire marshal" to "fire prevention and investigation program of the department of justice". This modernizes the language, making it consistent with other parts of the code and allows more flexibility in assigning functions within the department. The state Fire Marshal will still represent the state as the chief of the program.

There are also some changes in required duties. They are:

- "...will provide for continued inspections of state-owned buildings, including institutions and units of the university system, but will not jeopardize state buildings with immediate closure if fire code violations are found. This will allow continuation of the present practice of working with other state agencies and with the Legislature to achieve compliance with the fire code."

- "...Section 18 will eliminate the

requirement that every public building be inspected once each 18 months ... and will allow the department to establish a priority schedule for such buildings instead."

- "Section 18 removes the responsibility of the county sheriffs to make inspections.

- "Section 16 will allow the department to certify local fire inspection programs for local enforcement of fire codes ... so the fire marshal does not need to be involved in the day-to-day operations of those local fire departments with an operating inspection program."

- "The final amendment ... will repeal three obsolete sections of the code ... which pertain to standardization of fire protection equipment in 1929, and are no longer necessary."

The bill has passed both the House and Senate and is currently on the Governor's desk for approval.

## ***PORTABLE FIRE EXTINGUISHERS HOW OFTEN MUST THEY BE SERVICED?***

By Richard Levandowski

This question has been on-going for quite some time. As a result, property owners, service agents and enforcement officials have become very confused as to the intent of NFPA-10 "Standard For Portable Fire Extinguishers".

Some of this confusion can be clarified simply by understanding the definitions in the Standard. Definitions are:

### **INSPECTION:**

A quick check of the extinguisher to verify it is in its proper place, accessible and gives reasonable assurance that it is fully charged and operable.

This function can be performed by the building owner, manager or other employees and must be performed no less than every thirty days. Building owners, managers and other employees shall not use a service tag in recording these inspections. They shall, however, maintain a record in a log book or by some other means (computer, etc.) 23.7.154

ARM.

These persons are not required to hold a Certificate of Registration or License issued by the state Fire Marshal.

### MAINTENANCE:

A thorough examination of the extinguisher. Let's stop right here and clarify "thorough". Thorough means complete, absolute, very exact, accurate and done or proceeding through to the end.

Continuing with the definition of "maintenance" - It is intended to give maximum assurance that an extinguisher will operate effectively and safely. It includes a thorough examination and any necessary repair or replacement. It will normally reveal if hydrostatic testing is required.

### SERVICING:

Includes one or more of the following:

- (1) maintenance
- (2) recharging, and
- (3) hydrostatic testing.

Nowhere does servicing include inspection. Therefore, to service (perform maintenance, recharge or hydrostatic test) portable fire extinguishers, a person is required to hold a Certificate of Registration issued by the state Fire Marshal. 50-39-101 MCA.

Maintenance and its frequency is further clarified by going to NFPA-10 Sec. 4-4. Under 4-4.1 FREQUENCY, it states, "EXTINGUISHERS shall be subjected to maintenance not more than one year apart or when specifically indicated by an inspection. Maintenance procedures shall be performed in accordance with 4-4.2"

Section 404.2 PROCEDURES, states "Maintenance procedures shall include a thorough examination of the three basic elements of an extinguisher: (a) mechanical parts, (b) extinguishing agent, and (c) expelling means.

With this procedure, it stands to reason that the only way possible of checking (a) through (c) is to break down or disassemble the extinguisher. With this procedure and the requirement noted under 4-4.1 Frequency, which says "extinguishers shall be subjected to

maintenance not more than one year apart", it strongly implies that annual maintenance is required on ALL extinguishers.

Very simple up to this point and actually easy to understand, but now come the exceptions.

Let's first address Sec.4-4.1.1, "Stored pressure types containing a loaded stream agent shall be disassembled on an annual basis and subjected to complete maintenance". These types, therefore, must be serviced annually. It should not be difficult understanding these.

Next we go to 4-4.1.3. It states, "Every six years stored pressure extinguishers that require a 12-year hydrostatic test shall be emptied and subjected to the applicable maintenance procedures". This implies that those extinguishers listed in Table 5-2 of NFPA-10 that require a 12-year hydro-test do not require annual maintenance.

This list of extinguishers includes (1) dry chemical, stored pressure, with mild steel shells, brazed brass shells or aluminum shells, (2) halogenated agents, and (3) dry powder, stored pressure, cartridge - or cylinder - operated with mild steel shells.

As if this is not enough confusion, we go back to the EXCEPTIONS listed under Section 4-4.2, PROCEDURES, and find: "During annual maintenance, it is not necessary to internally examine stored pressure extinguishers except for those types specified in 4-4.1.1 (these are the loaded stream we previously mentioned). Again, the word annual is used and implies yearly. The exception goes on to say, "However, such extinguishers shall be thoroughly examined externally in accordance with the applicable items of 4-4.2(a)".

This means that one must examine the retaining pin, handle, trigger, seal, gauge, hose and nozzle. In reality, this is nothing but an inspection. Isn't this correct? (See 4-3 Inspection NFPA-10). It must be because no internal mechanical parts, extinguishing agent or expelling means were examined.

It's time to stop right here and explain that recharging (the replacement of the agent and/or expelling means) and hydro-testing have not been brought into the maintenance picture because they are two distinct and different functions. Don't confuse these functions with what is being discussed here.

Okay, now that that has been taken care

of, where are we in regard to the original question, "How often must fire extinguishers be serviced?" In checking with officials at NFPA headquarters, we have been advised that interpretation is made "by the authority having jurisdiction". This is substantiated by NFPA's definition of authority having jurisdiction; i.e., "the organization, office or individual responsible for approving equipment, an installation or a procedure". Therefore, interpretation is dependent upon the authority having jurisdiction.

Going back to the requirements mentioned above; how does a fire official or inspector determine when a fire extinguisher requires maintenance? Is it done in a simple fashion by requiring all extinguishers to have annual maintenance performed by a licensed agent or is it done in the complex nature in which NFPA-10 has it outlined: i.e.,

- Loaded stream - annual

- Dry chemical stored pressure with mild steel shells, brazed brass shells or aluminum shells, halogenated agents, dry powder, stored pressure, cartridge or cylinder-operated, with mild steel shells - every six years

- Wetting agent - annual

- AFFF and FFFP - every 3 to 5 years depending on whether the agent is in solid or liquid form

- Dry chemical with stainless steel shells and carbon dioxide - every 5 years

If this complex method is used, it must be understood that all inspectors will have to be knowledgeable enough to know how to recognize the difference between, for example, a mild-steel shell extinguisher and a stainless-steel shell extinguisher.

Based on this complex method, many property owners have become terribly upset as a result of an inspection by a fire official telling them to have their extinguishers serviced when, in reality, it wasn't necessary and vice-versa.

My purpose for bringing this question to light is not to provide you with an answer at this time but, rather, to ask you, "How often do you require extinguishers to be serviced in your jurisdiction"? Please consider this a survey and send your answer, along with a brief description of your justification, to my attention. Thank you.

## ***FEDERAL LEGISLATIVE REPORT***

By Ray E. Blehm, Jr.

### **COMMUNITY FACILITY LOANS**

- The Senate appropriations Subcommittee held a hearing on April 10 on Farmers Home Administration Budget. The FMHA budget includes funds for Community Facility Loans which are available to cities, counties and fire districts for construction and improvement of essential community facilities proving fire or rescue services, among others.

### **CENTER FOR FIRE RESEARCH**

- Chairman of the House Science, Space and Technology Subcommittee, Representative Valentine, states that "We not only do not plan to cut back on National Institute of Standards and Technology (NIST) fire research budget authorization, but are laying groundwork for continuing NIST accountability regarding fire research to Congress and to the constituencies the programs serve."

### **ENCLAVE FIRE PROTECTION ACT OF 1991**

- (HR1424) introduced by Rep. Jan Meyers (R-KS) would guarantee local fire departments the right to conduct pre-incident inspections of federal, state or local government properties.

### **NATIONAL FIREFIGHTERS DAY**

- (HJ Res 189) Rep. Curt Weldon. Designates October 8, 1991 as "National Firefighters Day"  
- 47 co-sponsors - referred to House Committee on Post Office and Civil Service.

### **VOLUNTEER PROTECTION ACT OF 1991**

- (HR 911) Rep. John Porter (R-K) gives states which enact laws exempting volunteers, acting in good faith, from personal financial liability related to their volunteer activities a 1% increase in Social Services Block Grants.

### **PIPELINE SAFETY ACT OF 1991**

- (HR 977) Rep. Curt Weldon (R-Pa) would require excess flow valves (EFV's) on all new or renewed natural gas distribution systems. EFV's shut off the gas when there is a greater than normal flow of gas, when the line is broken or when gas leakage occurs.

**ARSON INVESTIGATION "CATCHES FIRE"  
ADVANCED ARSON INVESTIGATION  
COURSE HELD**

by Robert Nieuwenhuyse

Richard Rotten, Sally Sweet, Fanny Friendly - These were a few of the "subjects/suspects" in a recent Advanced Fire/Arson Detection and Investigation course conducted by the Fire Marshal Bureau. On February 16 and 17, 26 students from both law enforcement and fire service agencies gathered at the hosting south Kalispell Fire Department to learn techniques in fire and arson investigation.

The 'hands-on' course was designed by Bob Nieuwenhuyse to condense a full arson investigation and prosecution into a 16 hour training session encompassing such skills as fire/crime scene examination and processing, photography, diagramming, evidence collection, interviewing and interrogation, criminal case preparation and presentation. A pre-requisite for attendance at this advanced session is a sixteen hour National Fire Academy course "Fire/Arson Detection", also instructed by Deputy State Fire Marshals.

After more than a week of preparation inside a donated structure, including cleaning and furnishing, five separate fires were set. Five man investigating teams were formed from the class and assigned one of the burns to investigate and process.

Richard, Sally and Fanny were some of the dozen-plus volunteer role players who were interviewed/interrogated by the teams while an on-scene 'crime lab' analyzed the evidence submitted and photographs taken at the scene were being developed.

The highlight of the course took place on Sunday afternoon, as a mock jury trial was held at the Flathead County Justice Center courtroom, involving one of the investigating teams, a deputy county attorney, a defense attorney and a U.S. magistrate. Instruction continued throughout the trial as both attorneys and the judge explained points of law and court/trial procedure to the assembled class members.

This P.O.S.T. certified course was instructed by Bob Nieuwenhuyse (Havre) and Mike Stotts (Kalispell); Deputy State Fire

Marshals who wish to thank Chief Bob Lee and the south Kalispell Volunteer Fire Department, Dave Mayhew, Attorneys Tom Esch and Don Vernay, U.S. Magistrate James Oleson, the role players and workers who helped make this course such a success.



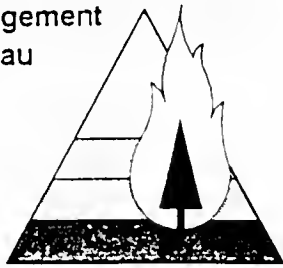
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# FIRE BREAKS

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MONTANA DEPARTMENT OF STATE LANDS

Fire Management  
Bureau



Forestry  
Division

## WILDLAND NEWS & VIEWS

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### MOBILIZATION OF COUNTY FORCES

During the 1988 wildland fire season, local firefighters and resources were used extensively throughout Montana and the Western United States. Since that time, the concept has continued to grow. Although we haven't seen the massive deployment of the 1988 season, local resources have been actively used throughout Montana and the United States since that time. This program benefits not only local fire departments but also is a benefit to state and federal agencies. As the program has developed, extensive input has been sought to develop appropriate guidelines for dispatches. Those local government fire agencies who are interested in working with Montana Department of State Lands in supplying local resources and personnel for state and federal fire dispatches should contact their local land office or unit office for complete details. A final guideline for those dispatches is currently under review and will be released shortly within DSL.

The guidelines address personnel, equipment standards and rates, inspection procedures, dispatch mobilization guidelines, and miscellaneous considerations. These guidelines are intended to provide clear direction for all fire agencies who wish to participate in the mobilization process. This is the result of input from Montana's Fire Service Organizations and evaluation of the process over several fire seasons.

The personnel guidelines discuss hiring procedures, physical fitness standards, training standards, and personal protective gear standards. This includes direction for both wildland and structural firefighters. Equipment standards and rates addresses payment, hiring, and standards for both structural and wildland firefighting equipment. Inspection procedures provide for those requirements before the incident dispatch, during the dispatch and at the time of demobilization.

Dispatch procedures allow for the "closest available forces" concept (i.e., mobilization of the closest/most expedient resources available to an incident, regardless of agency administrative boundaries) to be dispatched whenever possible. However, state or Federal resources may be mobilized instead of local government or private contract resources in certain circumstances to handle a specific need. (ie, tactical, monetary, and training considerations).

Montana's Fire Service has made substantial contributions to the process through their cooperation, hard work, and dedication to the fire service.

These guidelines are intended to strengthen that relationship and provide for long term involvement of all interested fire agencies. Contact your local Montana Department of State Lands office for additional information.

## **PRIMARY ORIGIN AND CAUSE DETERMINATION OF WILDLAND FIRES**

Montana firefighters respond to hundreds of wildland fires in a year. Most of these result in quick initial attack control of the fire with minimal dollar loss or substantial damage. The cause of the fire is usually attributed to a standard response to related and similar fires.

How many times have you wondered if you really know what caused a fire? Many times, when we get a fire next to the railroad tracks, we automatically assume that a locomotive was the cause. Similarly, fires along a highway or interstate are usually attributed to a discarded cigarette tossed from a passing vehicle. No one bothers to look further as to origin and cause. A smart incendiary would create such a scenario to disguise a fire start.

Anyone can do a hasty origin determination if some of the basic rules of fire investigation are known and practiced. The first step is to determine which way the wind was blowing when the fire was first seen. Then, determine what area was already burned over and starting to cool when the first engine arrived. Knowledge of these two factors will usually serve to identify the, "area of origin".

Once you have identified the area of origin you can start looking for the, "point of origin," through examination of burn indicators. Unburned grass stems and heads, which have fallen, will usually point in the direction from which the fire came. Likewise, rocks, brush and tree stems, fence posts etc. are more heavily sooted on the side facing the direction from which the fire came. Locating the point of origin is simply a matter of, "backtracking" the fire's movement through the available fuels.

Take the time to learn from those routine fires so that when the fires occur that are critical as to fire cause determination, that you have the background and experience to determine the origin and cause of the fire.

## **FIREFIGHTER FATIGUE**

Firefighting is hard, dirty, and dangerous work. The fire itself creates some of the dangers, but firefighters need to make sure that they don't add to the problems because they have failed to take care of their physical needs. Tired and fatigued firefighters make mistakes. On a wildfire, mistakes often mean accidents and injuries. On a short term initial attack fire, these problems may not be readily apparent, however they may appear on the extended attack when firefighters have been working for longer periods of time.

Here are some keys in addressing the control of fatigue-related stresses of wildland firefighting:

- \* Work & Rest
- \* Heat Stress
- \* Smoke & Carbon Monoxide
- \* Food & Nutrition
- \* Physical Fitness
- \* Labor-Saving Techniques

### WORK AND REST

It is important to recognize that the fatigued and dehydrated firefighter will require long periods of time to recuperate. Plan early by allowing for several types of rest. Breaks are a hedge against fatigue. Frequent 10-30 second rest breaks between work operations will serve to extend the impact of fatigue. Longer breaks of 10 minutes or more will keep performance from declining.

The pulse can serve as a good way to gauge fatigue on the job. Firefighters should know their normal pulse rate and use that as a base for determining work activities. It can tell you if your breaks are long enough. Your pulse should recover to less than 110 beats per minute. Returning to work with a higher pulse rate speeds fatigue.

### HEAT STRESS

There are three forms of heat stress. The mildest is heat cramps. Heat stress can progress to heat exhaustion and heat stroke if you don't stop work, get to shade, and begin drinking fluids. While maintaining a high level of fitness helps protect against heat stress, fluid replacement is vital to avoid heat stress related problems. It is common to lose 1 to 2 quarts of sweat per hour.

Take the time to provide for fluids to be readily available for firefighters. This means that fire apparatus needs to carry drinking water and other juices and drinks. Plan early to replace fluids. Don't wait until you feel thirsty.

### SMOKE & CARBON MONOXIDE

Currently all of the health hazards of particulates and other constituents of smoke from wildland fires are not known. To avoid and limit exposure to smoke and carbon monoxide, provide for breaks out of heavy smoke, rotate crews, and keep shifts short in heavy smoke.

### FOOD & NUTRITION

Provide for meals to be delivered to firefighters on a regular basis. You may use up to 4,000 calories above normal daily needs if you are working a long shift. Also provide for snacks that can be carried on fire apparatus for extended periods of time without damage.

### PHYSICAL FITNESS

Fitness is one of the most important ways to help control fatigue. Fitness goes hand in hand with productivity and safety. Being overweight and out of shape makes the firefighting job harder and compromises safety and health. There are several methods of determining fitness prior to response. One of the most common is the step test. There are also several alternatives to this test that including running and other activities. Firefighters should be encouraged to promote fitness within their organizations. Future mobilization plans call for step testing of firefighters for state and federal dispatches in the region.

## LABOR SAVING TECHNIQUES

Become familiar with and proficient in the use of the tools that are used in wildland firefighting. Even fit, well-rested firefighters will tire too quickly when they work inefficiently. Provide for the right tools to do the work safely and efficiently. Take the time to plan the work to distribute the workload among all the firefighters.

Even with more efficient tools, labor saving techniques, physical fitness and the other keys discussed here, firefighters, working long hard hours in the heat and smoke without adequate rest become fatigued. The point is to minimize fatigue by understanding the keys mentioned here. With this in mind, incident managers and firefighters alike can do a better job to prevent unreasonable fatigue and reduce the risk of accident and injuries.

(Information edited from NWCG publication PMS 306-1, Fatigue and the Firefighter)

## MONTANA DSL FIELD OPERATIONS

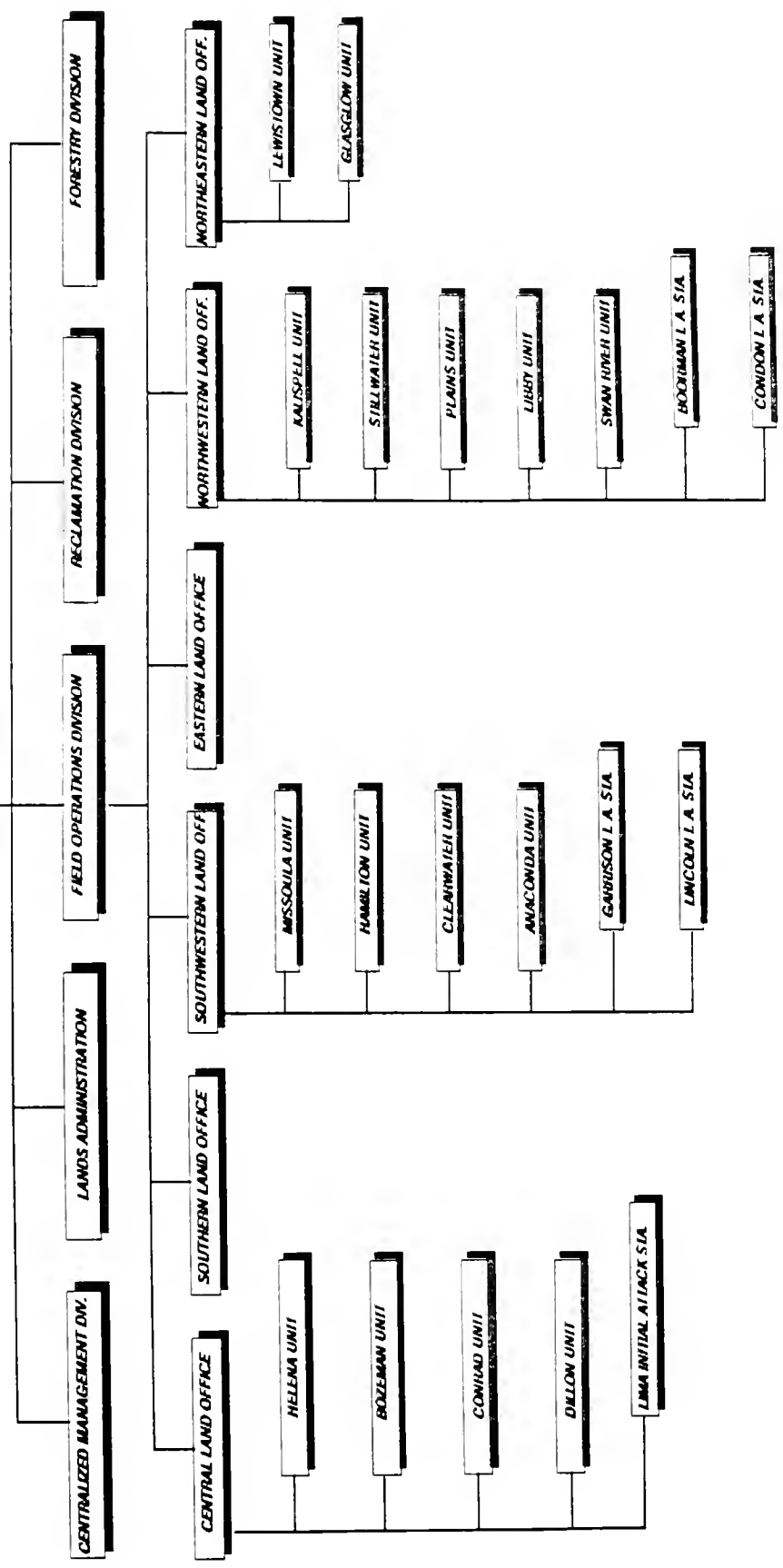
Montana Department of State Lands provides service and contact to the State through the Field Operations Division. The attach organizational chart is intended to present an overview of the divisions within DSL and also the individual land offices and unit offices. The services that DSL provides vary throughout the state and therefore a diverse system exists to meet that need.

In the next Fireguard, a chart showing the Fire Management Bureau's organization with the Forestry Division will be presented.

MONTANA  
DEPARTMENT  
OF STATE LANDS

FIELD OPERATIONS  
ORGANIZATIONAL  
CHART  
9-21-90

STATE BOARD OF LAND COMMISSIONERS  
COMMISSIONERS OFFICE



## Fire Training Section



## AIR BAG NOTICE!!!

### TRADE Meeting At Jackson Hole

Fire training officers from metro and state training agencies will meet at the Snow King Resort (1-800-522-KING) in Jackson Hole, May 15 - 17. TRADE is a NFA project intended to facilitate the exchange of training resources and ideas between entities. The meeting is open to interested parties. Cost: \$20 - \$30. Contact FTS for additional information.

### Advanced Code Course on Drawing Board

A followup to last year's Fire Code Seminar in Bozeman is in the planning stages. We are shooting for the second week of September. We are negotiating with an NFA instructor.

### **Do You Need A Wake Up Call?!**

"Fire fighters agree to operate on the danger level because their officers are protecting them on the command level... Anyone who has not started to understand and respond to the current shift in the safety responsibility of the command system needs a **Wake Up Call**. Incident Commanders operating in an earlier, unstructured mode are a danger to fire fighters. And fire fighters who let them operate in such a way are a danger to themselves." (Bruno suggested an agreement between ICs and their fire fighters. See January/February **Fire Journal** for the entire article, or contact FTS.)

**If you want to be seen, stand up. If you want to be heard, speak up. If you want to be praised, shut up.**

There are still numerous erroneous reports of "dangers" associated with automobile air bags circulating in the fire/rescue and law enforcement communities. According to Division Chief Bill Nesmith, Chairman of the IAFC Transportation Emergency Rescue Committee, any hazard associated with these lifesaving devices is extremely small. Emergency responders should never delay patient care solely because an air bag is present.

The Fire School has a video tape called, "AIR BAGS - A Crash Course for Rescue Personnel" V0447 and is available to Resource Center Users.

### **FROM CONGRESS: INTRODUCTION OF NATIONAL FIRE FIGHTERS DAY**

Honorable Curt Weldon of  
Pennsylvania

in the House of Representatives  
Wednesday, March 13, 1991

Mr. WELDON. Mr. Speaker, I rise today to introduce an important measure to honor America's domestic defenders, the American fire fighter. The bill will set aside October 8, 1991, as National Fire Fighters Day.

Three million men and women work in more than 32,000 fire departments across the nation to safeguard the American public from the ravages of fire. Frequently they do it for no other reason than public service, as fully 85 percent of them are volunteers.

These men and women place their lives on the line every day to improve public safety, and that does not always mean putting out fires. These men and women are also the first responders to natural disasters, airplane crashes, and medical emergencies.

Unfortunately, fire fighting is an extremely risky profession. Each year, more than 120 of these brave men and women fall in the line of duty. Earlier this month, a major blaze in Philadelphia claimed the lives of three such brave individuals. While there remain unanswered questions about the cause of this tragedy, there can be no doubt that every fire fighter deserves the acclaim and respect of Congress.

October 8 will mark the 120th anniversary of the Great Chicago Fire of 1871. It is appropriate to take time on that day to recognize the irreplaceable services performed by fire fighters.

Mr. Speaker, the service does so much for this Nation and asks so little. I urge my colleagues to join us in honoring these real American Heroes.

#### **UNITED STATES FIRE ADMINISTRATION REVEALS NEW EMERGENCY MEDICAL SERVICES MISSION**

The Federal Emergency Management Agency's (FEMA) U.S. Fire Administration (USFA) is expanding its support of the nation's fire service by targeting efforts towards the management of pre-hospital emergency medical service (EMS).

USFA has issued a mission statement to clarify its goals of improving an already successful EMS management program through research, publications, information dissemination, and cooperation with other agencies and organizations.

USFA is charged with addressing issues that relate to the nation's fire problem, such as increasing the effectiveness of fire service management. For more information contact the Office of Firefighter Health and Safety, USFA, 16825 South Seton Ave, Emmitsburg, MD 21727.

## **RURAL FIRE TRAINING EXERCISE**

The Fairfield and Power Fire Departments held a training exercise in Teton County April 7. Fairfield Fire Chief Steve Diedrich and Captain Doug Harrington were in charge of the training session.



Power VFD's 1250 Engine

Fairfield and Power fire fighters went through crew safety, primary search, fire attack, rapid response and ventilation tactics. Resources used were 12 fire fighters, two engines, two tenders, portable cascade trailer, positive pressure fan and a smoke generator.

The Power Fire Department got to practice with their newly acquired 1250 GPM engine. Two 1-1/2" lines were used for attack with two deluge guns providing external protection. A 4-inch jet transferred water between two 2000 gallon portable tanks. The two tenders, 2800 and 3400 gallons, were able to keep the water shuttle with the water source four miles away from the exercise. The training exercise provided good insight to improve all the participants fire fighting skills.

FRENCHTOWN RURAL FIRE  
DISTRICT COMMISSIONS A  
COMPARABLE WORTH STUDY  
OF THE MONTANA VOLUNTEER  
FIRE FIGHTER'S SYSTEM

The Frenchtown Rural Fire District has engaged the services of Michael Kupilik, Ph.D., an economist at the University of Montana, to conduct a comparable worth study of the Montana Volunteer Fire Fighter's System. The Frenchtown Rural Fire District has requested that Dr. Kupilik provide them with information in the following areas:

1. A description of the organization and structure of fire fighting in Montana.
2. The value of the following services of volunteer fire fighters

A. RESPONSE VALUE

The value of time actually spent responding to incidents coded so disaggregation by local unit is possible.

B. EXISTENCE VALUE

The value of the existence of an organization ready to respond to a fire or other emergency. This is a measurement of the area under the demand curve for fire services or the total amount that all people of an area would be willing to pay to have fire protection services.

C. TRAINING VALUE

Value added to the community and State through the programs to train volunteers to respond with competence to fire, medical or other emergencies.

D. SUMMARY

The estimation of the total value to the community and state of all the services of all types by volunteer fire fighting organizations.

3. Capitalization

An estimation of the capital equipment held by volunteer fire fighting organizations and the replacement value of that equipment.

4. Census of Organization

A census of fire fighting organizations in the State of Montana by location and by type.

The Frenchtown Rural Fire District has guaranteed the funding for this study to Dr. Kupilik, since it is the belief of this Fire District that it is impossible for volunteer fire fighting agencies within the State to present their case to any elected body or agency in terms of their ability to meet their mission without this vital data. In addition, the census data obtained will allow a greater communication among agencies which will help to facilitate the standardization of training and cooperative buying. The data from the comparable worth study can also be utilized to present a sound statistical argument for the improvement of the Retirement System for volunteer fire fighters.

The study has been presented to and endorsed by the Board of Directors of the Montana Fire Districts Association. Dr. Kupilik made a presentation at the State Conference in April. The current responsibility for overseeing the study rests with Don K. Klepper, Ph.D., Board Chairman of the Frenchtown Rural Fire District. The Frenchtown Rural Fire District will be soliciting contributions from other fire districts in Montana to help defray the cost of the study.

**The nice thing about teamwork is that you always have others on your side.**



# Public Fire Safety

**QUESTION:** Should we be concerned about radioactive materials in smoke detectors?

**ANSWER:** Ionization detectors use a tiny amount of Americium 241, a radioactive element, to make the air in a small chamber conduct an electric current. Smoke particles entering the chamber disrupt the current, setting off the alarm. The risk from the minute amount of radiation emitted is negligible. Such exposure is roughly equivalent to moving from one apartment to the floor above, and hence that much closer to the sun. A far greater risk is relying on ionization smoke detectors alone to protect your family. Ionization devices respond quickly to open flames. But a slow, smoldering fire, the more common type of home fire, is best detected by photoelectric units, which rely on a beam of light and a light sensitive photocell. Photoelectric detectors, moreover, are almost as good as ionization detectors in responding to a "fast" fire. When smoke detectors were tested at the Consumer Reports Lab, the best performers were either photoelectric units or combination units with both a photoelectric and an ionization sensor.

Copied from 1990 CSFM Journal.

## PUBLIC FIRE SAFETY WORKSHOP

September 21 and 22 1991

We want you to put these dates on your calendar. The Phoenix Fire Department Clowns are headlining this Workshop, which is intended for fire fighters who talk with children about fire safety. They will discuss new ideas and methods of teaching fire safety. John and Gayle Staley from Billings will lead a workshop on counseling juvenile firesetters. They will help the fire fighter who is

asked to talk to juveniles who set fires. Other topics will include: how to teach with puppet and chemistry of fire for kids. A Montana sharing of programs is also planned. For more information call the Fire School.

## RESIDENTIAL SPRINKLERS

**What is the History of the Residential Fire Sprinkler System?** Typically before the 1970's, fire sprinkler systems were designed and installed almost exclusively in industrial and commercial properties. The purpose of these systems was to provide a level of property protection and thus a reduction in insurance premiums.

In 1975, in response to a presidential Commission Report, America Burning, the National Fire Protection Association (NFPA) developed a Standard (Code) for the installation of fire sprinklers within residential occupancies.

The NFPA published the first edition of the Installation of Sprinkler Systems in One and Two-Family Dwellings and Mobile Homes (NFPA 13D) in 1979.

Recognizing the residential fire death and injury problem, the NFPA 13D Standard was designed as a life safety sprinkler system. The sprinkler system installed in accordance with this standard is expected to prevent flashover (total involvement) in the room of fire origin and to improve the chance for occupants to escape or be evacuated.

The Fire Training School has received word that the Residential Sprinkler Trailer (RST) Project will be renewed this year. Fire departments who would like to host the RST should contact the Fire School.

**The amount of sleep required by the average person is about an hour more.**

# Around The State:

Randy Hoekne was recently elected Fire Chief in Baker, replacing Bernie Heiser.

Myron Boulden was elected Chief of the West Valley Kalispell VFD recently, following the retirement of Robin Street.

Billings Chief Lorren Ballard recently underwent orthoscopic knee surgery. He is back to work and doing well.

Great Falls Assistant Chief, Jim Hirose recently had a kidney transplant in Seattle and is reportedly doing fine. Jim could be back in mid-May.

Laurel recently ordered a new engine, due in January of 92. It will feature a 1500 GPM pump, 4 door cab and come fully-equipped (including large diameter hose) at a cost of \$206,000. Chief McGillin reports that the funds are already in the bank in a capitol reserve fund for equipment replacement.

The Missoula Fire Department has appointed Jerome Kahler ,Training Officer following the retirement of George Pederson.

Belgrade Fire Marshal, Skip Hoglund is using a video camera to tape the buildings he inspects. The videos are later used during pre-fire planning sessions.

Gallatin County Fire Council recently adopted SOP's for the mutual aid ordering of crews, (without apparatus) and incident management staff.

Belgrade and Rae Fire have both adopted requirements for quarterly re-qualification of members for SCBA use. They use both time and quality measures.

Dan Lannon was recently elected Chief of the Choteau VFD.

Phillips County DES Director, Clark Kelly recently got fire, EMS and law Enforcement personnel together for some ICS training in preparation for a countywide disaster drill this summer.

Lewis and Clark County Sheriff's Deputy Cheryl Nelson recently completed delivery of the "Surviving the Haz Mat Incident" Course for local emergency response personnel. (Contact FTS if you are interested in the same program.)

15 Dearborn fire fighters recently completed the Basic Skills Course. John Mooney and Jimmie Stewart were the Instructors.

30 fire fighters from the Gardiner area completed the "Fire Attack" Course. Robert Kopland, Don Singer and Bryan Connelley were the Course Moderators. The 12 hour Course is self-taught with videos and manuals and is available from the Fire School's Resource Center.

13 Townsend fire fighter recently completed the Basic Skills Course.

13 Manhattan fire fighter recently completed a Basic Skills Course. The five Bozeman fire fighters instructing the Course were: Skip Hougland, Karl Rowe, Dan Shyne, Mitch Thompson and Chuck Winn.

79 EMTs serve the citizens of Chouteau Counting according to Linda Williams, Chouteau County DES and Chouteau County Extension Office.

Billings Fire Department is laying off three fire fighters and 15 other city employees on June 30.

Park County Rural Fire District has purchased a video tape for the Resource Center. This video "School Bus Rescue" is a new addition to the Carbuster series.

Earl Furlong is the new Chief in Geraldine. Noah Martinez recently stepped down after 15 years.

## Around The State Continued:

North Central Montana Adjusters Association (NCMAA) will give their annual Fire Department Award on May 1 to the Black Eagle and Gore Hill Fire Departments. The NCMAA recognizes groups and individuals in the fire fighting field for outstanding performance.

### New Tender at East Helena Valley Fire Department



1982 Peterbuilt chassis with 8V92 Detroit diesel engine and 750 Allison auto transmission. The tender has a 4000 gallon tank with 10" side and rear dump valves. A fold-a-tank is on the driver's side. It also has a 300 GPM Bowie PTO pump with suction on both sides and 3" side and rear fill.



## April 3 - A Bad Fire Day

It was the day Fort Belknap, all Blaine County departments, Malta, Dodson and BIA units from Fort Peck, and Poplar joined forces to handle a fire along the Milk River. The fire ran 6 to 7 miles in 40 to 50 MPH winds, jumping the River in 10 places, destroying 11 structures. The fire started on the Fort Belknap Reservation from a permitted, controlled burn. Because the River is the Reservation boundary, unified command was implemented to manage the incident. George Stiffarm from BIA and Kraig Hansen from Harlem were Incident Commanders.

It was also the day the Amsterdam Fire (Gallatin County) and Hall's Ambulance handled a five fatality auto accident where four victims burned in one of the vehicles! Dave Hoekema, Amsterdam Chief was IC.

## Outreach - Reaching Out

Have your members been introduced to the new Fire Fighter 1 Training Program? Are you familiar with positive pressure ventilation? What's happening with hazardous materials training and federal requirements? These and other topics are addressed routinely by FTS Staff at local fire meetings. FTS Staff log many miles meeting with local organizations, not only to provide information, but also to stay in touch with you. It's the best way we've found to stay abreast of challenges faced by you and your organization.

We are interested in visiting you. Contact the Fire School and let us know when you would like us to stop by.

## Catlett Report:

The National Transportation Safety Board has released a report on the tragic incident which took the lives of 3 fire fighters in Catlett, Virginia. Their engine drove in front of a 77 MPH train at a grade crossing. The Report is of special interest because of the stress level the apparatus driver was under as a result of having failed to follow the Department's SOPs prior to the collision. Copies are available from FTS.

## Product Alert

The Consumer Product Safety Commission (CPSC) is investigating incidents involving HEAT TAPE and OIL FILLED PORTABLE ELECTRIC HEATERS. If anyone is aware of any recent fires or reports of malfunctions involving these products, contact the CPSC immediately. 1-800-638-CPSC

## POSITIONS AVAILABLE

Fire Chief, \$27,500 to \$31,000. Pendleton, Oregon requires CPR & EMT Certification. New Fire Department, for more information call (503) 276-3018.

Fire Inspector, \$2000 to \$2208 month. Send resume to: Wheatridge Fire District; Box 507; Wheatridge, CO. 80034. Closes May 14.

**It's discouraging to make a mistake, but it's downright humiliating to find out you're so unimportant that nobody noticed it.**

## Fire Brigades Anyone?

Did you know OSHA has requirements for "fire brigades, industrial fire departments and private or contractual type fire departments!" They cover organization, training and protective equipment. FTS staff have recently encountered brigades which were totally unaware that such regulations existed. Contact FTS or OSHA for a copy.

### HAZARDOUS MATERIALS

#### What To Expect Next In HM Training

The State SERC has approved plans, and the FTS is working on an Awareness Level Hazardous Materials Course. The plan is to "hand off" the Course to local instructors during 12 deliveries, strategically located around the State before the end of the year.

Additionally, there will be funds available to meet face to face with local SERCs to discuss current SARA requirements.

#### Surviving the Haz Mat Incident Part 2

The State SERC is purchasing the second part of the "Surviving the Hazardous Materials" Course and student manuals from Emergency Resources in Colorado. The new instructor kit will be in the Fire School's Resource Center.

The International Association of Fire Fighters has given the Fire School a new instructor kit on "Haz Mat Teams."

# 1991 TRAINING SCHEDULE

It is important to pre-register for each of the following courses as minimum attendance has been established and must be met or class will be canceled. NOTE: (NFA-National Fire Academy Field Courses); (FTS-Fire Training School located in Great Falls Vo-Tech Center, 2100 16th Avenue South); (EMS-Emerg. Medical Service Bureau, 444-3895); (DES-Disaster & Emergency Services, Please call 444-6963 for registration.); (DOT-Department of Transportation); (DSL-Department of State Lands, 542-4300).

<u>DATE</u>	<u>COURSE</u>	<u>LOCATION</u>
<b>May</b>		
4	Wildland Fires Cause & Origin	FTS - Great Falls
5	Auto Vehicle Fires	FTS - Great Falls
4 - 5	EMT Basic Exam	Miles City
7 - 10	DES Radiological Monitor Instructor Class	Miles City
10 - 11	EMS Advanced Trauma Life Support	Big Sky
10 - 11	Incident Command System	Browning
15 - 17	Region 8 TRADE Conference	Jackson Hole, WY
18 - 19	EMT Basic Exam	Missoula
20	DES Flood Flight Workshop	Drummond
<b>June</b>		
1 - 2	Basic Fire Inspections	Columbus
1 - 2	Dive Rescue School	Bozeman
5 - 8	Volunteer Fire Fighter's Convention	Glasgow
10	DES Haz Mat Railroad Emergency Response	Williston, ND
11	DES Haz Mat Railroad Emergency Response	Wolf Point
12	DES Haz Mat Railroad Emergency Response	Glasgow
13	DES Haz Mat Railroad Emergency Response	Malta
13 - 14	EMS Defibrillation, Intermediate, Paramedic	Great Falls
14	DES Haz Mat Railroad Emergency Response	Havre
15	DES Haz Mat Railroad Emergency Response	Havre
15 - 16	EMT Basic Exam	Great Falls
17	DES Haz Mat Railroad Emergency Response	Shelby
17 - 18	NFPA Sprinkler Systems (2 Day)	Minneapolis, MN
17 - 19	NFPA Sprinkler Systems (3 Day)	Minneapolis, MN
17 - 20	NFPA National Electrical Code	Minneapolis, MN
17 - 20	DOT Basic Radioactive Materials and Haz Mats Transportation	Idaho Falls, ID
18	DOT Emergency Response Radioactive and Transportation	Idaho Falls, ID
18	DES Haz Mat Railroad Emergency Response	Whitefish
18 - 19	NFPA Life Safety Code (2 Day)	Minneapolis, MN

## **JUNE (Cont'd)**

18 - 21	NFPA Life Safety Code (4 Day)	Minneapolis, MN
19	DES Haz Mat Railroad Emergency Response	Whitefish
20	DES Haz Mat Railroad Emergency Response	Libby
20 - 21	NFPA Fire Alarm Systems	Minneapolis, MN
21	DES Haz Mat Railroad Emergency Response	Sand Point, ID
21 - 26	LEA Instructor Development	Bozeman
22	Fighting Fires in Sprinklered Buildings	FTS - Great Falls, 9am - 3pm
22 - 23	Ventilation Tactics	Butte
23	Fighting Fires in Sprinklered Buildings	EOC, Billings, 9am - 3pm
24	DES Haz Mat Railroad Emergency Response	Thompson Falls
25	DES Haz Mat Railroad Emergency Response	Missoula
26	DES Haz Mat Railroad Emergency Response	Missoula
27	DES Haz Mat Railroad Emergency Response	Helena
28	DES Haz Mat Railroad Emergency Response	Belgrade

## **July**

1	DES Haz Mat Railroad Emergency Response	Big Timber
8	DES Haz Mat Railroad Emergency Response	Laurel
9	DES Haz Mat Railroad Emergency Response	Billings
11	DES Haz Mat Railroad Emergency Response	Great Falls
12	DES Haz Mat Railroad Emergency Response	Great Falls
13	DES Haz Mat Railroad Emergency Response	Malmstrom AFB
17 - 19	Montana Firemen's Association Convention	Miles City
21 - 25	Western Fire Chief's Conference	Portland, OR
22	Fighting Fires in Sprinklered Buildings	FTS - Great Falls
23	Fighting Fires in Sprinklered Buildings	Billings
23 - 25	DES Radiological Monitor Instructor	Bismarck, ND
27	Residential Sprinkler Trailer	Sheridan

## **August**

7 - 10	Residential Sprinkler Trailer	Livingston
14 - 17	Residential Sprinkler Trailer	Twin Bridges

## **September**

11 - 12	Creative Financing	Billings
11 - 12	Developing Volunteer Resources	Billings
14 - 15	FF Safety & Survival: Co. Officer's Responsibility	Helena Valley
21 - 22	Fire Safety Workshop with Phoenix Clowns	FTS - Great Falls
27 - 28	MT Fire Chiefs Conference (Recruiting, Retaining And Motivating Quality Personnel - Jack Snook)	Great Falls

## **October**

6 - 12	Fire Prevention Week	Nationwide
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## November

17 - 22 LEA Arson Investigation

Bozeman

## January 1992

4 - 5 (NFA) FF Safety & Survival: Company Officer's  
Responsibility

Wolf Point

\* Make sure you register for each course, please register with the different sponsoring agencies.  
For FTS and NFA courses use the following Form.

### REGISTRATION FORM

Return To: Montana Fire Training School; 2100 16th Avenue South; Great Falls, MT 59405-4997 Phone: 761-7885

Course \_\_\_\_\_ Date: \_\_\_\_\_

Name \_\_\_\_\_ Soc. Number \_\_\_\_\_

Daytime Phone \_\_\_\_\_ Department \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_

### Example

### RISK MANAGEMENT SAFETY POLICY

1. If you open it, close it.
2. If you turn it on, turn it off.
3. If you unlock it, lock it.
4. If you break it, repair it.
5. If you can't fix it, report it to your supervisor
6. If you borrow it, return it.
7. If you use it, don't abuse it.
8. If you make a mess, clean it up.
9. If you move it, put it back.
10. If you don't know how to operate it, leave it alone.
11. If it belongs to someone else, get permission before taking it.
12. If it doesn't concern you, don't mess with it.

FIRE GUARD NEWSLETTER  
MSUES Fire Training School  
2100 16th Avenue South  
Great Falls MT 59405-4997



BULK RATE